JIEO CIRCULAR 9008 dated 30 June 1993

PAGE	PARA	LINE	COMMENT	RFC AUTHORIZING CHANGE
1-3	1-3 R.		Change date from 27 November 1989 to "01 March 1989".	PENDING
1-3	1-3		Add the following references: 1. "CIO ASD #TBD. NITFS Tagged Record Extension Register. (Document Control Number TBD)."	96-014A
			2. "CIO ASD #TBD, version 2.0. NITFS Profile for Imagery Archives Extensions (PIAE), 25 April 1996."	96-015A
			3. "CIO ASD SIA 05940000, version 1.0. Standards Profile for Imagery Archives, 20 July 1994."	
1-3	1-3		Add reference to listing: "#. MIL-STD-188-199. Vector Quantization Decompression for the NITFS, 27 June 1994."	95-053
5-2	5-3	Last	Change to : "The specific test conditions for ARIDPCM Compression, Bi-Level Compression, JPEG Compression, Vector Quantization Decompression, CGM, TACO2, and NITF version 1.1 backward compatibility are identified in Appendices D, E, F, G, H, I, and J respectively."	95-053
5-3	TABLE 5-1	Image Blocking	For CLEVELs 3-6, change "Multiple 256^2, 512^2, 1024^2" to: "Multiple 32^2, 64^2, 128^2, 256^2, 512^2, 1024^2".	94-008
5-3	TABLE 5-1		Common Coordinate System Size/Clevel 6 Change "2147483648" (2 Gbytes) to "2147483647 (2 Gbytes - 1 byte)."	95-005 **96-016A SUPERSEDES**
5-3	TABLE 5-1		Common Coordinate System Size/Clevel 6 Delete "Max file size 2 Gbytes -1 byte)." [Takes upper limit off generation of CLEVEL 6 files.]	96-016A
5-4	TABLE 5-1		Controlled Tags Row: Change for ALL CLEVELs: "Controlled tags may appear in the following fields: XHD, IXSHD, SXSHD, LXSHD, TXSHD, and "Controlled Extensions" DES regardless of CLEVEL."	96-014A
5-4	TABLE 5-1		Registered Tags Row: Change for ALL CLEVELS: "Registered tags may appear in the following fields: UDHD, UDID, and "Registered Extensions" DES regardless of CLEVEL."	96-013
5-4	TABLE 5-1		Add three rows for VQ as follows for all CLEVELs: 'VQ Compression: 4x4 Kernel, 4 tables, w/ & w/o masking. VQ Monochrome: With & without LUT, IMODE = B. VQ 8-bit color: For CLEVEL 1: No. For CLEVELs 2-6: With LUT, IMODE =B."	95-053

PAGE	PARA	LINE	COMMENT	RFC AUTHORIZING CHANGE
5-6	5-4		Add new subpara. 5-4H for VQ Decompression as follows: "H. VQ Decompression. Support of VQ decompression is not mandatory; however, if implemented, the system must comply with the specifications and guidance contained within this document."	95-053
5-9	5-5 A	3	Add to the end of the sentence: ", with the exception of the Label Text Color (LTC) and the Label Background Color (LBC) fields in the Label sub-header, which will be represented in Hexidecimal."	94-011
5-10	5-6 A.2	3	Change to: "The system may support eight bit precision JPEG compression."	95-003 PENDING ISMC RESOLUTION
5-10	5-5 K	2	Change "2147483648" (2 Gbytes) to "2147483647 (2 Gbytes - 1 byte)."	95-005 **96-016A SUPERSEDES**
5-10	5-5K		Replace as follows: "Files sizes for CLEVEL 1 files must not exceed 1,213,000 bytes."	96-016A
5-10	5-5L		Add 5-5 L as follows: "For CLEVEL 6, unpack capable systems must at least be able to unpack files with file sizes up to and including 2 Gbytes minus 1 byte (2147483647 bytes). Systems capable of packing CLEVEL 6 files greater than 2 Gbytes may, as an option, also have the capability to split the file (file segmentation) for recipients which are limited to unpacking less than 2 Gbyte files. 1. File Segmentation. File segmentation will be at up to 27 H x 37 V blocks for the primary piece with the overflow going into the subsequent file(s). Upon receipt, the receiver can mosaic the files as required to present a seamless image to the user. 2. File Naming. When a file naming convention is used which identifies "FAF blocks", the file names of the segmented image will indicate the FAF blocks at which the image was split. 3. Reduced Resolution Data Sets. When produced, reduced resolution data sets (i.e. RI through R7) will consist of a single file for each data set aligned with the original (un-segmented) image (R0)."	96-016A 96-016A

PAGE	PARA	LINE	COMMENT	RFC AUTHORIZING CHANGE
5-10	5-6.A.1.g		Add "g. VQ compressed (8 bits-per-pixel)."	95-053
5-10	5-6.A.2		Add to the end of the paragraph "Recompression of decompressed VQ images is prohibited; however, a decompressed VQ image may be packed in its uncompressed state (NC) or in its original compressed form (C4 or M4)."	95-053
5-11	5-6.B.1.		Add "f. VQ compressed (8 bits-per-pixel)."	95-053
5-11	5-6B1c(2)	1	Change: "Band Interleaved by Pixel (compressed)" to "Band Interleaved by Pixel (uncompressed and compressed)."	94-010
5-11	5-6.B.2		Add to the end of the paragraph "Recompression of decompressed VQ images is prohibited; however, a decompressed VQ image may be packed in its uncompressed state (NC) or in its original compressed form (C4 or M4)."	95-053
5-11	5-6 C.1.	3	Change block sizes of "256^2, 512^2, $1K^2$" to: "32^2, 64^2, 128^2, 256^2, 512^2, and $1K^2$."	94-008
5-12	5-6.C.1.f		Add "f. VQ compressed (8 bits-per-pixel)."	95-053
5-13	5-6.C.2		Add to the end of the paragraph "Recompression of decompressed VQ images is prohibited; however, a decompressed VQ image may be packed in its uncompressed state (NC) or in its original compressed form (C4 or M4)."	95-053
5-13	5-6 D.1.	1	Change block sizes of "256^2, 512^2, $1K^2$" to: "32^2, 64^2, 128^2, 256^2, 512^2, and $1K^2$."	94-008
5-14	5-6.D.1.		Add "e. VQ compressed (8 bits-per-pixel)."	95-053
5-14	5-6.D.2		Add to the end of the paragraph "Recompression of decompressed VQ images is prohibited; however, a decompressed VQ image may be packed in its uncompressed state (NC) or in its original compressed form (C4 or M4)."	95-053
5-15	5-8 B.	2	Remove: "For CLEVELs 1-3 it may optionally support 12 bit source sample precision."	94-009
5-15	5-8 E.	1	Change "paragraph 5-7 D" to: "paragraph 5-8 D".	94-015
5-15	5-8 I.	1	Change "paragraph 5-7 H" to: "paragraph 5-8 H".	94-015

PAGE	PARA	LINE	COMMENT	RFC AUTHORIZING CHANGE
5-16	5-8 T.		Replace paragraph as follows: "JPEG entropy decoders shall be able to decode and display a JPEG compressed image in which no more than 10% of the restart intervals in the compressed data stream contain errors. JPEG entropy decoders shall recognize the following as errors: - Restart Marker appearing too early in the data steam. - Restart Marker appearing too late in the data steam. - Restart Marker missing from the data stream. - Unknown Huffman Code in data stream. When an entropy decoder detects any of these errors in the compressed JPEG data stream, the imagery system must identify the corrupted data in the decoded image. This can be accomplished by suitable reporting or replacing the corrupted data with a suitable pattern so that when the decoded image is displayed, it is apparent that the compressed data stream had an error. This pattern shall be limited to the RST Interval(s) in which the error occurred. All RST intervals must be decoded and displayed."	94-016
5-16	5-8 V.	1-2	Delete paragraph.	94-014
5-18	New 5-11		Add new 5-11 as follows: "5-11. IMAGE DECOMPRESSION CRITERIA, VQ A. The image data field of the VQ compressed NITFS file shall contain a VQ header followed by the compressed image data when the image compression field is set to M4 or C4. B. The SUT shall support both v x h kernel-by-kernel decompression and individual rows for all v x h kernels stored together such that the image can be decompressed line-by-line.	95-053

PAGE	PARA	LINE	COMMENT	RFC AUTHORIZING CHANGE
5-18	New 5-11		C. The first image code in the VQ image data field shall be used to spatially decompress the v x h indices in the upper left corner of the image. The decompression shall continue from left to right across the columns of the first row of image codes, then down each of the rows of image codes sequentially.	95-053

D. For color images that are compressed, each
value in the spatially decompressed image represents
an index into the color table output.

E. VQ implementations within NITFS shall be limited
to 8-bit RGB with LUT, or monochrome with or without LUT.

F. The compression ratio (COMRAT) field shall be
present in all NITFS VQ files and shall contain a value
given in the form nn.n representing the average number
of bits-per-pixel for the image after compression. This
entry is for informational purposes only and is not
used in the decompression process.

G. The Image Compression (IC) field shall contain
the value C4 if the image is not masked or M4 if the
image is masked.

H. The NITFS VQ image data section shall provide
the number of compression codes, the size of each
4x4 kernel organized in four tables.

I. The current implementation of VQ within NITFS
shall use a single band with an associated LUT, and
Is considered to have an IMODE of B, band interleaved
by block.

     1. For current VQ NITFS applications, the
number of spectral groups shall be 1.

     2. The number of blocks per row and number
of blocks per column fields within the NITFS image
subheader define the number of image block tables
in the spatial data subsection.

     3. If the image contains one or more
spectral band table(s), the pixels within the image will
correspond to a single-value quantity such as a grayscale
value or a single entry within a color table.

     4. The image row level of organization
in the NITFS image subheader shall correspond
to the image row level in the VQ header.

     5. The number of bands in the NITFS
image subheader shall correspond to the number
of bands in the VQ header.

PAGE	PARA	LINE	COMMENT	RFC AUTHORIZING CHANGE
5-18	New 5-11		J. Fields containing identification and origination information, file security information, and the number and size of the data items contained in the NITFS file shall be located in the NITFS file header. Within the image data section, multibyte fields are written in the "big endian" format.	95-053
			K. A VQ header shall have the structure identified in MIL-STD-188-199.	
			L. Recompression of decompressed VQ images is prohibited; however, a decompressed VQ image may be packed in its uncompressed state (NC) or in its original compressed form (C4 or M4). "	
5-23	5-16		Replace section as follows: "A. When the number of tagged extensions overflow the base subheader extension area, the NITF compliant system must fill the Number of Data Extension Segments (NUMDES) field with the appropriate non-zero value upon generation of a NITF file. Files generated by NITF compliant systems that do not use Data Extension Segments must fill the NUMDES field with "000." Systems that require the use of Data Extension Segments, shall fill the NUMDES field, Length of Nth Data Extension Segment Subheader (LDSHnnn), and Length of Nth DES Data Field (LDnnn) with the associated values determined by the length of the DES. Systems that require the use of Data Extension Segments shall be tested for the generation of the associated data defined by the Data Extension Segment.	96-033A
			B. Upon receipt of a file where the NUMDES field contains a count other than "000," the system must otherwise properly interpret the other legal components of the file. All overflow tags tested within the Data Extension Segment	
5-23	5-16		shall be registered with the NITFS ISMC. Systems that require the use of Data Extension Segments shall be tested for the interpretation of the associated data defined by the Data Extension Segment."	96-033A
5-23	5-17		Replace section as follows: "A. Files generated by NITF compliant systems that do not use Reserved Extension Segments must fill the NUMRES field with "000." Systems that require the use of Reserved Extension Segments, shall fill the NUMRES field, Length of Nth Reserved Extension Segment Subheader (LRSHnnn), and Length of Nth RES Data Field (LRnnn) with the associated values determined by the length of the RES. Systems that require the use of Reserved Extension Segments shall be tested for the	96-033A

PAGE	PARA	LINE	COMMENT	RFC AUTHORIZING CHANGE
5-23	5-17		Continued: "...generation of the associated data defined by the Data Extension Segment. B. Upon receipt of a file where the NUMRES field contains a count other than "000," the system must otherwise properly interpret the other legal components of the file. Systems that require the use of Reserved Extension Segments shall be tested for the interpretation of the associated data defined by the Reserved Extension Segment. All tested Reserved Extension Segments shall be controlled with the NITFS ISMC."	96-033A
5-24	5-19		Replace current section on Attachment Level criteria as follows: "**A.** The image, symbol, or label component in the file having the lowest numerical display level shall have attachment level zero and the common coordinate system location of 0,0. **B.** SUTs capable of packing overlay elements within a file must support packing the elements with the base element having attachment level 000 and all other elements having attachment levels of 000 or greater. Unpack capable SUTs must support attachment levels over the range of 000 - 998. **C.** The attachment level of an overlay element must be equal to the display level of the overlay element or the base element to which it is attached. **D.** The display level of an element must always be numerically greater than its attachment level. **E.** The SUT must properly display and position all elements based on the specified row and column offset from the item's origin point to which it is attached. **F.** As an option, the SUT may maintain the parent-child relationship among its attached elements so that the elements may be treated together as a group for certain operations such as, moving, rotating, and displaying."	96-019

PAGE	PARA	LINE	COMMENT	RFC AUTHORIZING CHANGE
5-24	5-20		Replace current para 5-20 as follows: "**USER DEFINED DATA, REGISTERED TAG CRITERIA.** The following criteria pertain to all implementations of the NITFS.	96-013

A.   Upon receipt of a file which contains information in the user defined data fields, the system must at least properly interpret the other legal components of the file.

B.   Only those user defined data tags registered with the ISMC may be used.

C.   Each registered tagged record extension consists of three required fields: RETAG, (6 byte unique extension identifier), REL (length of extension in bytes), and REDATA (user-defined data).

D.   A sequence of registered tagged record extensions can appear in the User Defined Header Data (UDHD) field of the NITF file header or any image subheader User Defined Image Data (UDID) field.

E.   A sequence of registered extensions can also appear in a Data Extension Segment (DES) which is designated to contain registered extensions. This condition will be identified by the first three characters of the UDHD or UDID field containing the sequence number of the "Registered Extension" DES into which the tags are placed.

F.   When the registered tagged record extension carries data that is associated with the file as a whole, it should appear in the UDHD field. If the extension carries data associated with an image data item in the file, it should appear in the UDID field of that item if sufficient room is available.

G.   A registered tagged record extension must be included in its entirety within the specific UDHD or UDID selected to contain it."

PAGE	PARA	LINE	COMMENT	RFC AUTHORIZING CHANGE
5-24	5-21		Replace current para 5-21 as follows: "**A. General.** The following criteria pertain to all implementations of the NITFS.	96-014A

1.   Upon receipt of a file which contains information in the extended data fields, the system must at least properly interpret the other legal components of the file.

2.   Only those controlled tags approved by the ISMC may be used...."

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PAGE	PARA	LINE	COMMENT	RFC AUTHORIZING CHANGE
5-24	5-21		Replace current para 5-21 as continued:	96-014A

"**...   3.**   Each controlled tagged record extension consists of three required fields: CETAG, (6 byte unique extension identifier), CEL (length of extension in bytes), and CEDATA (user-defined data).

4.   A sequence of controlled tagged record extensions can appear in the Extended Header Data (XHD) field of the NITF file header or in the Extended Sub-header Data field for any standard data type data item in the file.

5.   A sequence of controlled extensions can also appear in a Data Extension Segment (DES) which is designated to contain controlled extensions. This condition will be identified by the first three characters of the XHD, IXSHD, SXSHD, LXSHD, or TXSHD field containing the sequence number of the "Controlled Extension's" DES into which the tags are placed.

6.   A controlled tagged record extension must be included in its entirety within the specific XHD, IXSHD, SXSHD, LXSHD, TXSHD, or DES selected to contain it.

B.   Support Data Extensions (SDE's). The following general criteria apply to those systems which produce NITF files containing SDEs.   Production sources that produce NITFS files with SDE's must create these files in compliance with the NITFS and the approved SDE specification(s) appearing on the NITFS Tagged Record Extensions Register.

1.   All information, including numbers, contained in SDE tags must be given in the printable ASCII character set [space (32) through tilde (126)] with eight bits (one byte per character.

2.   All data in fields designated as "alphanumeric" must be left justified and padded with spaces as necessary to fill the field.

3.   All data in numeric fields must be right justified and padded with leading zeroes as necessary to fill the field.

4.   All required fields must be present and must contain valid data as defined in the SPID and associates documentation.

5.   The implementation must ensure that the correct data from the source data is mapped into the appropriate support data extension(s).

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| 5-24 | 5-21 | | Replace current para 5-21 as continued: | 96-014A |

6. The implementation must not allow the inclusion of an extension tag(s) if the information within the extension(s) is not available from the source support data.

7. The implementation will ensure that information included in an extension(s) that is also required in NITF header or image subheader fields is mutually consistent."

| 5-24 | 5-21C. | | Add paragraph as follows: | 96-015A |

"5-21 C.   Profile for Imagery Archives Extensions (PIAE). The following criteria pertain to those systems which support the creation and use of PIAEs. Refer to the NITFS Profile for Imagery Archives Extensions (PIAE) for additional information. Production sources that produce NITFS files with PIAEs must create these files in compliance with the NITFS, NITFS Profile for Imagery Archives Extensions, and Standards Profile for Imagery Archives.

1. All information, including numbers, contained in PIAE tags must be given in the printable ASCII character set [space (32) through tilde (126)] with eight bits (one byte) per character.

2. All data in fields designated as "alphanumeric" must be left justified and padded with spaces as necessary to fill the field.

3. All data in numeric fields must be right justified and padded with leading zeroes as necessary to fill the field.

4. All required fields must be present and must contain valid data as defined in the NITFS PIAE.

5. Only archive systems are allowed to enter data into the Access id (ACCESSID) field of the PIAPR tag.

6. When used, PIAE tags shall appear in the following extended data fields or "Controlled Extensions" DES if overflowed:

a. PIAPR tag: XHD of main header; one per file.

b. PIAIM tag: IXSHD of image subheader; one per each image in the file.

c. PIATG tag: IXSHD of image subheader, SXSHD of symbol subheader, LXSHD of label subheader, TXSHD of text subheader; up to 250 per file.

PAGE	PARA	LINE	COMMENT	RFC AUTHORIZING CHANGE
5-24	5-21C		Continued.	96-015A

"   d.   PIAPE tag: IXSHD of image subheader, SXSHD of symbol subheader, LXSHD of label subheader, TXSHD of text subheader; up to 250 per file.

          e.   PIAVA tag: IXSHD of image subheader, SXSHD of symbol subheader, LXSHD of label subheader, TXSHD of text subheader; up to 250 per file.

          f.   PIAEQ tag: IXSHD of image subheader, SXSHD of symbol subheader, LXSHD of label subheader, TXSHD of text subheader; up to 250 per file.

          7.   Any system modifying an NITF file will ensure that the FDT field has been updated.

          8.   As a minimum, systems submitting NITF files to an archive must include a PIAPR tag and a PIAIM tag for each image in the file they create for submission.

          9.   Receiving Archives:

          a.   Must review NITF files to ensure they are in compliance with NITFS and PIAE documentation. This will include:

                    1. Checking NITF header and subheader data.
                    2. Checking PIAE tag data.
                    3. Identifing missing tags.

          b.   When problems with incoming NITF files are identified, the file will be queued for operator review and action.

          c.   Must archive submitted files that have no format problems without operator interface.

          d.   Must apply a unique Access ID (ACCESSID) to newly submitted files containing an existing PIAPR tag when the file is new to the archive.

          e.   Will insert a PIAPR tag if the submitted file is new to the archive and contains no PIAE tags. All required fields will be filled out and an Access ID (ACCESSID) will be assigned.

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5-24	5-21C		Continued.	96-015A

"10.   Disseminating Archives:

      a.   Will ensure that non-NITF formatted files converted to NITF format are in compliance with all applicable NITFS and PIAE requirements.

      b.   Will ensure NITFS compliance is maintained on output files resulting from data manipulation actions such as pixel subsampling, chipping, decompressing, compressing, etc.

      c.   Will ensure that files, originally archived as NITF files, have preserved the original data integrity of imagery, symbol, label, text and support data."

PAGE	PARA	LINE	COMMENT	RFC AUTHORIZING CHANGE
5-28	5-24 D.	2-3	Change "Synchronous timing, baud rates of 300 bps through 32 Kbps will be supported." to: "Synchronous timing, rates of 1,200, 2,400, 4,800, 9,600, 16,000, 19,200, and 32,000 bps will be supported."	94-013
5-28	5-24 D.	2-3	Change "asynchronous timing, baud rates 300 bps through 19.2 Kbps will be supported." to: "asychronous timing, rates of 1,200, 2,400, 4,800, 9,600, 19,200 bps will be supported."	94-012
5-28	5-24L.		Replace paragraph as follows: "L. The TACO2 implementation must support the following operation, delays and waits for RS-232C (or equivalent) control signals as specified. Figures 5-X and 5-Y show control lead positions and delays from sample TACO2 traffic.	96-011 DEFERRED

     1. RTS (Request-To-Send). RTS must be held high while data is being transmitted. The implementation must have a means to wait a user-selectable amount of time after raising RTS and before transmitting data (RTS turn-on-delay). The implementation must also have a means to wait a user-selectable mount of time before lowering RTS after transmitting data (RTS) turn-off delay). All delays (i.e., RTS turn-on delay, RTS turn-off delay, and half duplex turn-around delay) must be user selectable from 0 to 10 seconds in intervals no larger than 200 milliseconds. The physical control lead response must have an accuracy of±200 milliseconds of the delay setting.

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5-28	5-24L.		Replace paragraph as continued:	96-011 DEFERRED

"   a. Full Duplex. In full duplex mode, RTS may be either kept high throughout the transfer or lowered between buffers or bursts.

b. Half Duplex. In half duplex mode, RTs must be kept low between buffers to allow for incoming packets to be received. In half duplex mode, the implementation must wait a user specified amount of time before checking for DCD to be dropped low (if the DCD check is enabled) and raising RTS.

c. Simplex. In simplex transmit mode, RTS may either be kept high thoughout the transfer or lowered between buffers or bursts. In simplex receive mode, RTS must remain low.

2. CTS (Clear-To-Send). The implementation may have an option, which can be disabled, to check and wait for CTS to be high before transmitting. When enabled, the check for CTS must occur after RTS is raised and before initiating the RTS turn-on delay.

3. DCD (Data-Carrier-Detect). The implemenation may have an option, which can be disabled, to check and wait for DCD to be either high or low before transmitting.

a. Full Duplex. When enabled, in full duplex mode, the implementation must check and wait for DCD to be high. In full duplex mode, the check for DCD must occur after raising RTS and before check ing for CTS to be high (If the CTS check is enabled) and before initiating the RTS turn-on delay.

b. Half Duplex. When enabled, in half duplex mode, the implementation must check and wait for DCD to be low after the half duplex turn-around delay expires and before raising RTS.

c. Simplex. When enabled, in simplex mode, the implementation may check and wait for DCD to be either high or low. If the implementation is set to check and wait for DCD to be low, the check must occur before raising RTS. If the implementation is set to check and wait for DCD to be high, the check must occur after raising RTs and before checking for CTS to be high (if the CTS check is enabled) and before initiating the RTS turn-on delay."

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5-28	5-24L.		Replace paragraph as continued:	96-011 DEFERRED
			" 4. DTR (Data-Terminal-Ready). The implementation must hold DTR high while in receive mode and while transmitting a file. The implementation may have options to pulse DTR (i.e., drop DTR and then immediately raise it) between bursts, or to keep DTR high after completing a transfer."	
5-29	5-24		Add "M. At a minimum, TACO2 implementation supports, the transmission and reception of the largest CLEVEL 1 file allowed by section 5.2 and 5.3 of this circular. This is currently limited to 1.213 Mbytes. The test file must be handled under a single file transfer, not split among multiple transfer sessions."	96-003
5-29	5-24		Add: "N. The TACO2 implementation supports BERT."	95-039
5-29	5-24		Add: "O. The TACO2 implementation supports FEC-1."	95-040
5-29	5-24		Add: "P. The TACO2 implementation supports abbreviated headers."	95-041
5-29	5-24		Criteria further defining TACO2 physical interface specifications.	96-011 NTB DEFERRED MAR 96
A-3	Appx A	4	Change "DQT, Defense Q-Table" to:"DQT, Define Q-Table".	94-019
A-7			Add new acronym "VQ, Vector Quantization".	95-053
C-2	Appx C	FL	Change "2147483648" (2 Gbytes) to "2147483647 (2 Gbytes - 1 byte)."	95-005 **96-016A SUPERSEDES**
C-2	Appx C	FL	Change FL format value to: "000000000388-999999999999."	96-016A
C-6	Table C-2	COMRAT	Add to COMRAT field "00.0" to provide for use of custom Q-tables.	95-058
C-6	IC field		Add following format values to accomodate VQ: "NC - No compression; C1-Bi-Level; C3-JPEG; C4-VQ (Not masked); M4-VQ(Masked)."	95-053
C-6	COMRAT field		Add following format values to accomodate VQ: "For IC =C4, COMRAT=nn.n; IC=M4, COMRAT=nn.n".	95-053

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PAGE	**PARA**	**LINE**	**COMMENT**	**CHANGE**
New Appx G			VQ Requirements	95-053
I-1	Appx I	MDT Line	Change "DDHHMMSSVMONYY" to "DDHHMMSSZMONYY".	94-018
I-2	Appx I		Add missing fields applicable to an NITF 1.1 file header which were inadvertently dropped when document was published.	95-004
I-4	Appx I	20	After "NBPC" and before "DLVL", add in the appropriate columns: "NPPBH, Number of Pixels per Block Horizontal, 4, 0008-0512, R; NPPBV, Number of Pixels Per Block Vertical, 4, 0008-512, R; NBPP, Number of Bits-Per-Pixel Per Band, 2, 01-08, R."	94-017
1-3	1-3		Proposed additions reflecting USIS SPID	95-006
1-8A	1-9		requirements.	PENDING ISMC
5-1	5-1		(See RFC for details.)	RESOLUTION
6-1	New Chp 6			ASOF 10/20/94